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【Research report】

臺灣產三叉蚜繭蜂屬之一新種 (膜翅目：小繭蜂科)【研究報告】

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Abstract

摘要

三叉蚜繭蜂屬(Trioxys)隸膜翅目、小繭蜂科、蚜繭蜂亞科，乃蚜蟲之寄生蜂；本文描述臺灣產寄生於危害桂竹之毛竹綿粉蚜(Phyllaphoides bambusicola Takahashi)之一新種：Trioxys (Trioxys) liui Chou & Chou sp. nov. 劉氏三叉蚜繭蜂，並輔以重要之性狀圖。

Key words:

關鍵詞: 劉氏三叉蚜繭蜂、小繭蜂科、蚜繭蜂亞科、臺灣、分類。

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A New Species of *Trioxys* (Hymenoptera: Braconidae) from Taiwan

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ABSTRACT

Trioxys liui sp. nov. (Braconidae: Aphidiinae) reared from *Phyllaphoides bambusicola* Takahashi on bamboo in Taiwan is described and illustrated.
Key words: *Trioxys liui*, Braconidae, Aphidiinae, Taiwan, taxonomy.

臺灣產三叉蚜繭蜂屬之一新種(膜翅目：小繭蜂科)

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摘　要

三叉蚜繭蜂屬(*Trioxys*)隸膜翅目、小繭蜂科、蚜繭蜂亞科，乃蚜蟲之寄生蜂；本文描述臺灣產寄生於危害桂竹之毛竹綿粉蚜(*Phyllaphoides bambusicola* Takahashi)之一新種：*Trioxys* (*Trioxys*) *liui* Chou & Chou sp. nov. 劉氏三叉蚜繭蜂，並輔以重要之性狀圖。
關鍵詞：劉氏三叉蚜繭蜂、小繭蜂科、蚜繭蜂亞科、臺灣、分類。

Introduction

Species of the genus *Trioxys* Haliday are parasitoids of aphids. This genus contains 2 subgenera, *Binodoxys* Mackauer and *Trioxys* Haliday. About 53 species of the subgenus *Trioxys* are known worldwide, of which only two species are previously recorded from Taiwan (Stary and Schlinger, 1967; Tao and Chiu, 1971; Liu, 1975). This paper deals with a new species of the subgenus *Trioxys* occurring in Taiwan.

The terminology used here mainly follow Huber and Sharkey (1993), Stary and Schlinger (1967) and Stary (1973). The specimens used in this study are deposited in the Insect Collection of the Taiwan Agricultural Research Institute, Taichung, Taiwan, R.O.C.

Trioxys (Trioxys) liui sp. nov.

Trioxys (*Trioxys*) sp. Stary & Schlinger, 1967. Ser Entomol. 3: 127.

Trioxys (*Trioxys*) *bambusa* Liu, 1975. J. Agric. Res. China 24(3-4): 69. **nom. nud.**

Female: Head: 1.6 times as wide as long and 1.3–1.4 times wider than mesonotum. Temple 0.58–0.62 times as long as dorsal length of eye, converging weakly behind eye. POL 0.30–0.33 times as long as OOL and subequal to ocellar diameter; distance between toruli 1.0 times as long as that between torulus and eye. Face 1.0–1.1 times as high as wide and 0.50 times as wide as eye height and 0.28 times as wide as head; clypeus 1.4–1.6 times as wide as high; tentorial index 0.17; malar space 0.08–0.10 times as long as eye height. Antenna 11-segmented; lst flagellomere 3.3–3.5 times as long as wide and 1.1–1.2 times as long as 2nd (Fig. 1), with 3–4 placoid sensilla; 2nd flagellomere 3.0–3.2 times as long as wide, with 5 placoid sensilla; penultimate flagellomere 2.9 times as long as wide.

Mesosoma: Mesoscutum moderately prominent on anterior part; notauli distinct at perpendicular part only. Propodeum completely and distinctly areolated, areola wide. Forewing (Fig. 2): stigma 2.9 times as long as wide; vein R1 0.64 times as long as stigma length and 1.9 times as long as stigma width; vein Rs 3.5 times as long as stigma width.

Metasoma: Metasomal tergum I 1.7–1.9 times as long as wide at spiracle; spiracular tubercle slightly prominent, situated about at 0.33; distance between spiracle and apex distinctly longer than width across spiracles; lateral margins almost parallel beyond spiracular tubercles.

Genitalia: Anal prong (Fig. 3A) almost straight, apex slightly curved upwards; with 4 long setae on dorsal surface, and one claw-shaped bristle and 2 short setae at apex; ovipositor sheath (Fig. 3B) stout, sparsely setose but densely at apex, apical part shorter than basal part, its inside edge deeply concave.

Color: Dark brown; mandible paler; palpi white; metasomal tergum I and more or less tergum II, ovipositor sheath and anal prong yellowish brown. Antenna dark brown; scape, pedicel and lst flagellomere yellowish brown. Legs yellowish brown. Wings hyaline, veins light yellowish brown.

Length: body 1.4–1.5 mm, antenna 1.3–1.5 mm, forewing 1.5–1.6 mm.

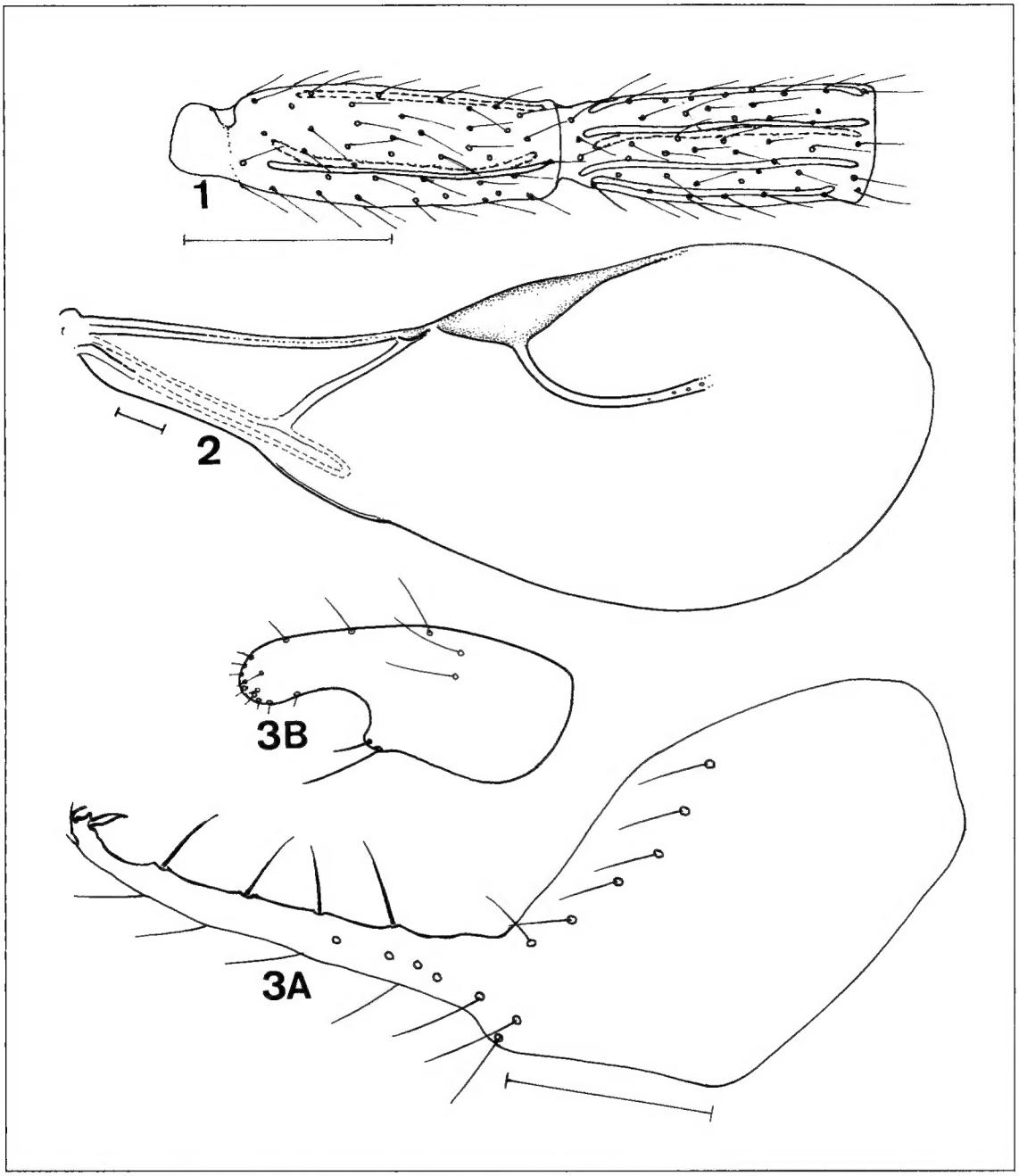
Male: Similar to female; face 0.38–0.44 times as wide as head; tentorial index 0.33; antenna 13-segmented.

Holotype: ♀, Nantou, Lienhuachih 650m, XII. 1989 ex *Phyllaphoides bambusicola* Takahashi on *Phyllostachys makinoi* Hayata (K.C. Chou). Paratypes: 5♀♀, 7♂♂, same data as for holotype.

Distribution: Taiwan

Hosts: *Cranaphis formosanus* (Takahashi) (Liu, 1975), and *Phyllaphoides bambusicola* Takahashi.

Remarks: This species is most closely allied to *Trioxys* (*Trioxys*) *japonicus*



Figs. 1–3. *Trioxys* (*Trioxys*) *liui* sp. nov.: 1, flagellomeres 1 and 2; 2, forewing; 3A, anal prong; 3B, ovipositor sheath (Scale: 0.1 mm).

Takada, 1966, but differs from it by the antenna 11–segmented, propodeum completely and distinctly areolated and the metasomal tergum I almost parallel–sided beyond spiracularle tubercle.

Etymology: Named after Mr. Ching–Shen Liu.

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References

Huber, J.T., and M.J. Sharkey. 1993. Structure. pp.13–59. *In* Goulet, H., and J.T. Huber, eds. Hymenoptera of the world: An identification guide to families. Agriculture Canada, Ottawa.

Liu, C.S. 1975. Aphid parasites and their propagation in Taiwan. J. Agric. Res. China 24(3–4): 62–84. (*in* Chinese)

Stary, P. 1973. A review of *Aphidius*–species (Hymenoptera: Aphidiidae) of Europe. Annot. Zool. Bot. 84:1–85.

Stary, P., and E.I. Schlinger. 1967. A revision of the Far East Asian Aphidiidae (Hymenoptera). Ser. Entomol. 3. W. Junk, The Hague. 204pp.

Takada, H. 1966. A preliminary revision of species of *Trioxys* Haliday occurring in Japan with description of eight new species (Hymenoptera: Aphidiidae). Ins. Mats. 29: 23–36.

Tao, C.C., and S.C. Chiu. 1971. Biological control of citrus, vegetable and tobacco aphids. Taiwan Agric. Res. Inst. Spec. Publ. 10:1–110.

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